

An Efficient AXI Read and Write Channel for Memory Interface in System-on-Chip

Abhinav Tiwari
M. Tech. Scholar, Embedded System and
VLSI Design
Acropolis Institute of Technology and
Research, Indore (India)
tiwari.abhinav21@gmail.com

Jagdish Nagar
Asst. Professor,
Acropolis Institute of Technology and
Research, Indore (India)
jagdishnagar@acropolis.in

Abstract –System-on-a-Chip (SoC) design has become more and more complexly. Because difference functions components or IPs (Intellectual Property) will be integrated within a chip. The challenge of integration is “how to verify on-chip communication properties”. Although traditional simulation-based on-chip bus protocol checking bus signals to obey bus transaction behaviour or not, however, they are still lack of a chip-level dynamic verification to assist hardware debugging. This paper proposes an efficient AXI read and write channel for memory interface in SOC.

Keywords –Intellectual Property, SoC, AXI.